JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Vol. 357 Nos. 1 and 2 15 OCTOBER 1993

Dedicated to Professor John O'M. Bockris on the occasion of his 70th anniversary

CONTENTS

A tribute and survey of his research over 47 years on the occasion of his 70th anniversary
John O'M. Bockris (College Station, TX USA) 1

Thermodynamic and electrode kinetic factors in cathodic hydrogen sorption into metals and its relationship to hydrogen adsorption and poisoning
B.E. Conway (Ottawa, Ont., Canada) and G. Jerkiewicz (Sherbrooke, Que., Canada) 47

Hydrogen pressure equivalent to overpotential on Pd + Ag alloy electrodes in acidic solutions in the presence of thiourea
M. Enyo and P.C. Biswas (Sapporo, Japan) 67

Hydrogen evolution studies in neutral media
T.N. Andersen, B.S. Dandapani and J.M. Berry (Oklahoma City, OK, USA) 77

Cathodic behaviour of IrO_2 electrodes in alkaline solution. Part 2. Kinetics and electrocatalysis of H_2 evolution
H. Chen and S. Trasatti (Milan, Italy) 91

Hydrogen evolution on aluminium in chloride solutions
D.M. Dražić and J. Popić (Belgrade, Serbia) 105

Electrocatalysis of aqueous dioxygen reduction
A.J. Appleby (College Station, TX, USA) 117

Kinetics of oxygen reduction on fully and partially immersed Pt, Pd and Au electrodes in an NaCl + KCl eutectic melt
H. Numata, I. Ohno, H. Takagi and S. Haruyama (Tokyo, Japan) 181

Enhanced electrocatalysis of oxygen reduction on platinum alloys in proton exchange membrane fuel cells
S. Mukerjee and S. Srinivasan (College Station, TX, USA) 201

Characterization of the limiting structural effects on the electrochemical behavior of porous gas diffusion electrodes
D.R. De Sena, E.A. Ticianelli and E.R. Gonzalez (São Carlos, Brazil) 225

On solid polymer fuel cells
H.P. Dhar (Bryan, TX, USA) 237

Analysis of electrochemical impedance spectroscopy data for lithium electrodes and lithium batteries
V.S. Bagotzky (Moscow, Russian Federation) 251

Enzyme electrodes based on ionomer films coated on electrodes
J.K. Harkness, O.J. Murphy and G.D. Hitchens (Bryan, TX, USA) 261

Products in solution during electrodeposition of polypyrrole
D.J. Fermín and B.R. Scharifker (Caracas, Venezuela) 273

Evaluation of the first discharge redox process of doped polypyrrole
F. Beck and M. Dahlhaus (Duisburg, Germany) 289

In-situ and real time monitoring of the InSe surface by atomic force microscopy with atomic resolution during electrochemical reactions
K. Uosaki and M. Koinuma (Sapporo, Japan) 301

Adsorption of anions on ultrathin metal deposits on single-crystal electrodes. Part 3. Voltammetric and radiochemical study of bisulfate adsorption on Pt(111) and Pt(poly) electrodes containing silver adatoms
P. Zelenay, M. Gamboa-Aldeco, G. Horányi and A. Wieckowski (Urbana, IL, USA) 307

The adsorption of methionine at a mercury electrode from aqueous solution
R. Parsons and R. Payne (Southampton, UK) 327

The role of slow surface-atom reordering processes in the underpotential deposition of metals. Silver underpotential deposition on platinum in acid solutions
P. Ocón, P. Herrasti, C. Palacio (Madrid, Spain), M.E. Vela, R.C. Salvarezza (La Plata, Argentina), L. Vázquez (Madrid, Spain) and A.J. Arvia (La Plata, Argentina) 339

Identification of phases in Ag + Pd alloys electrodeposited by the electrochemical ALSV technique
V.D. Jović, B.M. Jović and A.R. Despić (Belgrade, Serbia) 357

EXAFS studies of adsorbed copper on carbon-supported platinum
J. McBreen (Upton, NY, USA) 373

Underpotential deposition of dithiophosphate on chalcocite
A.N. Buckley (North Ryde, Australia) and R. Woods (Port Melbourne, Australia) 387

Photoresponse of undoped and iodine-doped iron oxide thin film electrodes
S.U.M. Khan and Z.Y. Zhou (Pittsburgh, PA, USA) 407

Author index 421

Subject index 423